Thank you for choosing a NIVELCO instrument.
We are sure that you will be satisfied throughout its use.

UNICONT

PLK-501, PLK-501-Ex
UNIVERSAL PLUG IN DISPLAY

USER'S MANUAL

1. APPLIACTION

UNICONT PLK-501 is a universally applicable plug-in process display. It is available in explosion proof, intrinsically safe version, too. The display is designed for 4…20 mA transmitter loop connection without the need of external power supply. The displayed numerical values can be freely scaled to the current input by the user, setting the maximum and the minimum value.
The display unit is for standard two wire transmitter, DIN 43650 connection. It should be assembled between the sensor base and the connector socket.

2. TECHNICAL DATA

2.1 GENERAL

Type	UNICONT PLK-501, PLK-501 Ex
System connection	2 wire DC
Input	4 … 20 mA (current loop)
Display	4 digit, 7,62 mm LED
Set up range	- 1999 … + 9999
Damping time	0,3 … 30 sec
Display accuracy	0,1% ± 1 digit
Voltage drop	≤ 6 V [I_{IN}: 25mA]
Ambient temperature	0°C … + 70 °C
Reference temperature	+ 25 °C
Over voltage	120 … 150 VDC (max 1 sec at 25 °C)
Electrical protection	Class III.
Explosion protection	ATEX Ex II (1) 2 G EExia IICT4
Intrinsic safety	Umax < 28V Pmax < 660 mW Imax < 93 mA
Electric connection	DIN 43650 connector
Ingress protection	IP 65
Dimensions	47 x 47 x 68 mm
Weight	~ 100 gr

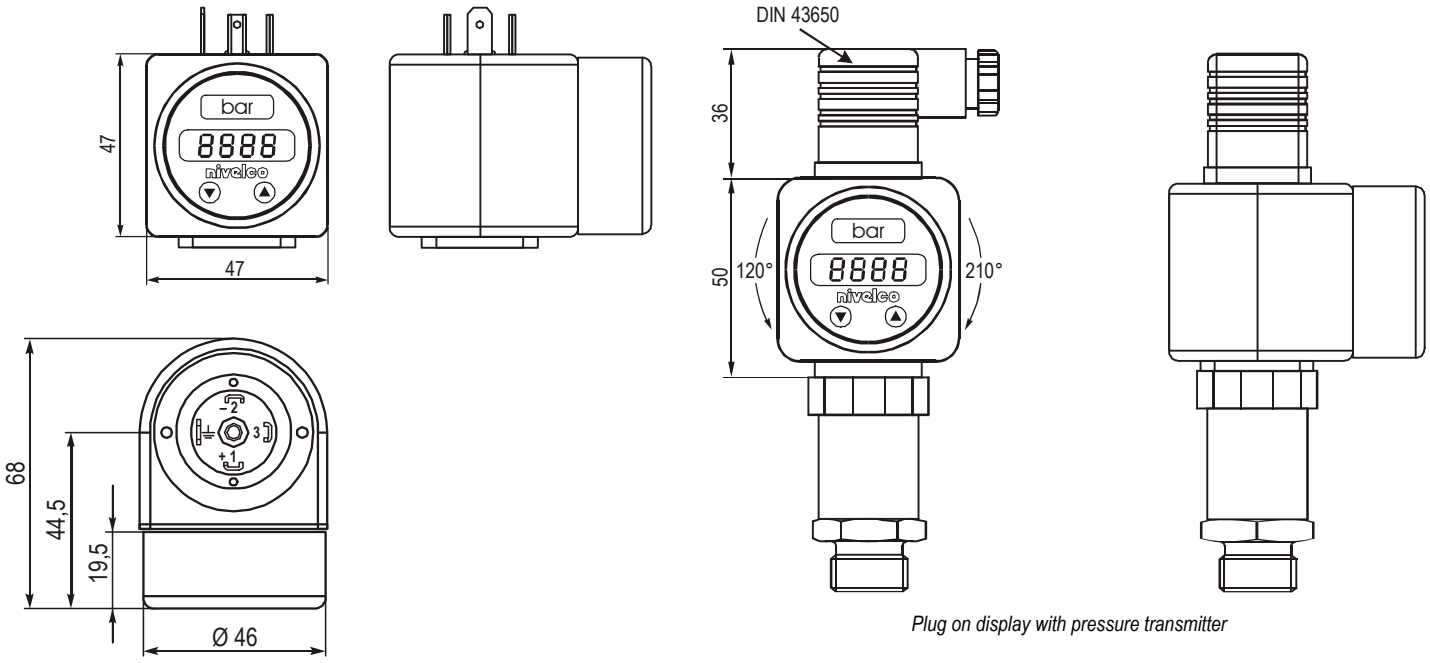
CE

Manufacturer:
NIVELCO Process Electronics Co.
1043 Budapest, Dugonics u. 11.
Phone: 36-1 369-7575 ♦ Fax: 36-1 369-8585
e-mail: sales@nivelco.com www.nivelco.com

2.2 ACCESSORIES

– User's manual – Warranty sheet – Stick-on measure unit label set – Stick-on face plate – Assembly screw

3 TECHNICAL DRAWINGS



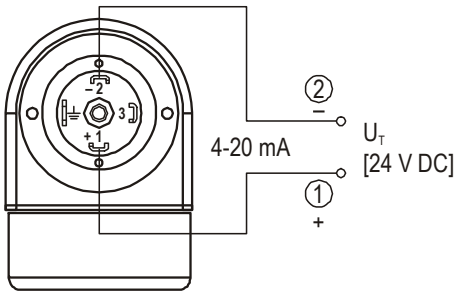
Plug on display with pressure transmitter

4. INSTALLATION

Plug the display unit between the sensor's connector (standard DIN 43650) and the socket with the wires connected, than fix the three parts with the assembly screw. Pay attention for the sealing between the parts!

Choose the right measuring unit label from the set and stick it on in the appropriate location than stick on the faceplate positioning carefully, so that the buttons can be used with the faceplate, too.

5. ELECTRICAL CONNECTIONS



Connect the 2 conductor cable to the DIN socket after disassembling it.

Lead the cable through the gland.

6. SETTING UP THE DISPLAY

The displayed values must be adjusted to the 4-20mA loop current that flows through the unit (scaling process). This is done via the two buttons on the faceplate.

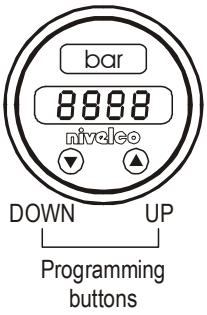
UNICONT PLK-501 display offers numerous set-up menu points.

Entering the configuration menu and navigating among the menu points is done by the up and down arrow buttons.

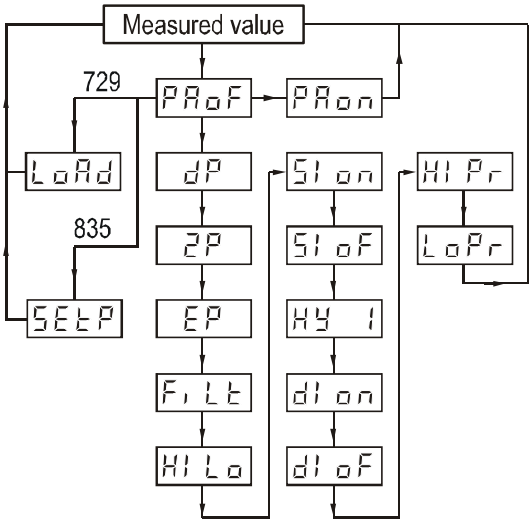
Pressing the two buttons simultaneously does entering and returning/saving from the menu points.

Pressing a button for longer period than 5 seconds the rate of counting increases.

FACEPLATE



MENU GRAPH



PRoF Security code OFF (default)
"1" appears after entering the menu point if security code option is off. Changing this digit to the previously determined security code disables further programming. After exiting the menu point the display shows: PRon. The default security code is "0".

Pressing the two buttons simultaneously enters the menu point and performs save-and-exit command.

PRon Security code ON, programming disabled
Entering the menu point „1" appears. Entering the valid security code will enable programming. After exiting the menu point the display shows: PRoF

PRoF Setting the security code: enter menu point and set "835" numerical value (special funcion) SEtP appears on the display. Acknowledge with simultaneous button pressing – "1" appears – enables new security code entry (0….9999). Accept the new code with the buttons pressing them together.

dP Setting the decimal point position:
Enter - set the position – save/exit

2P Setting the value corresponding to 4mA

EP Setting the value corresponding to 20mA

F, Lt Input signal filter, adjustable between 0,3-30sec

HI Lo Not applicable

SI on Not applicable

SI oF Not applicable

HY 1 Not applicable

dI on Not applicable

dI oF Not applicable

HI Pr Read out of maximum measured value since the last power up. The values can be reset with interrupting the power.

LoPr Read out of minimum measured value since the last power up. The values can be reset with interrupting the power.

LoAd Loading factory default settings. Enter the PRoF menu point, enter the number "729" and press the two buttons together. LoAd appears and pressing the buttons together loads the factory default settings except for the security code.

7. EXPLOSION PROTECTION

Only explosion proof transducer and explosion proof display is allowed to use in explosion proof environment!
In such conditions the unit must be fed by intrinsically safe galvanically separated power supply or connected to 4...20mA current loop through galvanical separator.

8. MAINTENANCE, REPAIR

The device does not require routine maintenance. In case dust adheres to the face of the device the faceplate can be cleaned. Repairs during or beyond the warranty period are carried out solely by the manufacturer in the factory.

9. STORING CONDITIONS

Environmental temperature range: –25°C...+80°C

10. WARRANTY

All Nivelco products are warranted free of defects in materials or workmanship for a period of two years from the date of purchase. The warranty is valid only with the warranty card and the purchase invoice together. Repairs - under guarantee or not - are carried out at the Manufacturer's premises.The Purchaser is liable for costs of dismantling and re-installation as well as transport costs. Nivelco shall not be liable for misapplication, labour claims, direct or consequential damage or expense arising from the installation or use of equipment.

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Nivelco reserves the right to change technical specifications without notice.